

Instructions for Downloading and Post-processing GPS Data

Jessica Phelps November 18, 2008

1. Connect the mobile device to the PC. **Microsoft ActiveSync** should automatically recognize the mobile device and connect. If ActiveSync does not register in 15s, manually open it off the program menu. When prompted by ActiveSync do not sync the mobile device with the computer, you only what to manually choose which folders to move back and forth.

2. Open **Pathfinder Office**; from the utilities menu or the side bar icon choose **Data Transfer**.

- Connect to the datalogger by windows CE then choose **Add→Data File**
- Here you will see a window with all the files on your mobile device select the desired file and be sure to specify an output folder that corresponds to the project because you will direct all subsequent files there.

- Transfer all**

- Close Data Transfer window

3. From the Utilities menu or the side bar Icon choose **Differential Correction**. Here you will be prompted to choose the file you would like to correct (i.e. the file you just transferred)

- Choose the type of processing that you would like to perform. If you are unsure choose **Automatic standard carrier and code processing**.

- When prompted to select a base station select the closest available with the highest integrity index (integrity is based out of 100 and higher is better). If you don't see what you are looking for try updating the list.

- Choose to use the same folder as the input data and create a unique file name option.

- Start differential correction. When it is finished close the dialogue box, you should now have a file in your project folder with a .cor extension. This contains your corrected data and is the file you will want to export.

You have now differentially corrected your GPS data if you would like to create a shapefile for use in ArcMap proceed to step 4.

4. Choose **export** from the Utilities menu or from the side bar icon.

- Select the .cor file that you wish to export and set the export folder to your project folder.

- Under export setup click new then create **new setup: dBASE**

- In the export setup properties box click attributes and choose all attributes you want to export with your data, specify coordinate system and check all other tabs to make sure all the settings are as you want them. If you don't know what they mean leave them as the default. Click OK

- Click OK again on the export dialogue box. Your files have now been exported.

- Open your dbf file in excel, this is a chance to edit the attributes so they make sense. Format the cells so you have appropriate decimal places, all text is on one line

(otherwise it is cut off in the attribute table) and so date and time display correctly. Then save and close the file. (If you try and load the file into ArcMap with it open in excel you will receive an error message)

Loading your files into ArcMap

5. Open a new map in ArcMap and add your dbf file.
 - Under tools click **add xy data**
 - Choose the appropriate table from the drop down menu (the file you just created)
 - Specify **Longitude for your x field and Latitude for your y field** (or for UTM x = Easting, y = Northing)
 - edit the coordinate system to your specifications, click apply, then OK and OK again.
 - Right click on the new event theme layer **Data – Export data** to create a new shapefile
 - Add the shapefile to your ArcMap document.

jphelps@uoregon.edu